

## Continuum of Expectations: Number Sense & Numeration

Quantity Relationships	
Grade 5	Grade 6
Overall Expectation	
<ul style="list-style-type: none"> <li>Read, represent, compare, and order whole numbers to 100 000, decimal numbers to hundredths, proper and improper fractions, and mixed numbers</li> </ul>	<ul style="list-style-type: none"> <li>Read, represent, compare, and order whole numbers to 1 000 000, decimal numbers to thousandths, proper and improper fractions, and mixed numbers</li> </ul>
Specific Expectations	
<ul style="list-style-type: none"> <li>Represent, compare, and order whole numbers and decimal numbers from 0.01 to 100 000, using a variety of tools</li> </ul>	<ul style="list-style-type: none"> <li>Represent, compare, and order whole numbers and decimal numbers from 0.001 to 1 000 000, using a variety of tools</li> </ul>
<ul style="list-style-type: none"> <li>Demonstrate an understanding of place value in whole numbers and decimal numbers from 0.01 to 100 000, using a variety of tools and strategies</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate an understanding of place value in whole numbers and decimal numbers from 0.001 to 1 000 000, using a variety of tools and strategies</li> </ul>
<ul style="list-style-type: none"> <li>Solve problems that arise from real-life situations and that relate to the magnitude of whole numbers up to 100 000</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems that arise from real-life situations and that relate to the magnitude of whole numbers up to 1 000 000</li> </ul>
<ul style="list-style-type: none"> <li>Read and print in words whole numbers to ten thousand, using meaningful contexts</li> </ul>	<ul style="list-style-type: none"> <li>Read and print in words whole numbers to one hundred thousand, using meaningful contexts</li> </ul>
<ul style="list-style-type: none"> <li>Represent, compare, and order fractional amounts with like denominators, including proper and improper fractions and mixed numbers, using a variety of tools</li> </ul>	<ul style="list-style-type: none"> <li>Represent, compare, and order fractional amounts with unlike denominators, including proper and improper fractions and mixed numbers, using a variety of tools</li> </ul>
<ul style="list-style-type: none"> <li>Demonstrate and explain the concept of equivalent fractions, using concrete materials</li> </ul>	
<ul style="list-style-type: none"> <li>Round decimal numbers to the nearest tenth, in problems arising from real-life situations</li> </ul>	
<ul style="list-style-type: none"> <li>Demonstrate and explain equivalent representations of a decimal number, using concrete materials and drawings</li> </ul>	
<ul style="list-style-type: none"> <li>Read and write money amounts to \$1000</li> </ul>	
	<ul style="list-style-type: none"> <li>Estimate quantities using benchmarks of 10%, 25%, 50%, 75%, and 100%</li> </ul>
	<ul style="list-style-type: none"> <li>Identify composite numbers and prime numbers, and explain the relationship between them (i.e., any composite number can be factored into prime factors)</li> </ul>

Counting	
Grade 5	Grade 6
<b>Overall Expectation</b>	
<ul style="list-style-type: none"> <li>Demonstrate an understanding of magnitude by counting forward and backwards by 0.01</li> </ul>	
<b>Specific Expectations</b>	
<ul style="list-style-type: none"> <li>Count forward by hundredths from any decimal number expressed to two decimal places, using concrete materials and number lines</li> </ul>	

Operational Sense	
Grade 5	Grade 6
Overall Expectation	
<ul style="list-style-type: none"> <li>Solve problems involving the multiplication and division of multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to hundredths, using a variety of strategies</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving the multiplication and division of whole numbers, and the addition and subtraction of decimal numbers to thousandths, using a variety of strategies</li> </ul>
Specific Expectations	
<ul style="list-style-type: none"> <li>Solve problems involving the addition, subtraction, and multiplication of whole numbers, using a variety of mental strategies</li> </ul>	<ul style="list-style-type: none"> <li>Use a variety of mental strategies to solve addition, subtraction, multiplication, and division problems involving whole numbers</li> </ul>
	<ul style="list-style-type: none"> <li>Solve problems involving the multiplication and division of whole numbers (four digit by two-digit), using a variety of tools and strategies</li> </ul>
<ul style="list-style-type: none"> <li>Multiply two-digit whole numbers by two-digit whole numbers, using estimation, student-generated algorithms, and standard algorithms</li> </ul>	<ul style="list-style-type: none"> <li>Multiply whole numbers by 0.1, 0.01, and 0.001 using mental strategies</li> </ul>
<ul style="list-style-type: none"> <li>Divide three-digit whole numbers by one-digit whole numbers, using concrete materials, estimation, student-generated algorithms, and standard algorithms</li> </ul>	
<ul style="list-style-type: none"> <li>Use estimation when solving problems involving the addition, subtraction, multiplication, and division of whole numbers, to help judge the reasonableness of a solution</li> </ul>	<ul style="list-style-type: none"> <li>Use estimation when solving problems involving the addition and subtraction of whole numbers and decimals, to help judge the reasonableness of a solution</li> </ul>
<ul style="list-style-type: none"> <li>Add and subtract decimal numbers to hundredths, including money amounts, using concrete materials, estimation, and algorithms</li> </ul>	<ul style="list-style-type: none"> <li>Add and subtract decimal numbers to thousandths, using concrete materials, estimation, algorithms, and calculators</li> </ul>
<ul style="list-style-type: none"> <li>Multiply decimal numbers by 10, 100, 1000, and 10 000, and divide decimal numbers by 10 and 100, using mental strategies</li> </ul>	<ul style="list-style-type: none"> <li>Multiply and divide decimal numbers by 10, 100, 1000, and 10 000 using mental strategies</li> </ul>
	<ul style="list-style-type: none"> <li>Multiply and divide decimal numbers to tenths by whole numbers, using concrete materials, estimation, algorithms, and calculators</li> </ul>
	<ul style="list-style-type: none"> <li>Explain the need for a standard order for performing operations, by investigating the impact that changing the order has when performing a series of operations</li> </ul>

## Proportional Relationships

Grade 5		Grade 6	
Overall Expectation			
<ul style="list-style-type: none"><li>Demonstrate an understanding of proportional reasoning by investigating whole-number rates</li></ul>		<ul style="list-style-type: none"><li>Demonstrate an understanding of relationships involving percent, ratio, and unit rate</li></ul>	
Specific Expectations			
<ul style="list-style-type: none"><li>Describe multiplicative relationships between quantities by using simple fractions and decimals</li></ul>			
<ul style="list-style-type: none"><li>Determine and explain, through investigation using concrete materials, drawings, and calculators, the relationship between fractions (i.e., with denominators of 2, 4, 5, 10, 20, 25, 50, and 100) and their equivalent decimal forms</li></ul>		<ul style="list-style-type: none"><li>Determine and explain, through investigation using concrete materials, drawings, and calculators, the relationships among fractions (i.e., with denominators of 2, 4, 5, 10, 20, 25, 50, and 100), decimal numbers, and percents</li></ul>	
<ul style="list-style-type: none"><li>Demonstrate an understanding of simple multiplicative relationships involving whole-number rates, through investigation using concrete materials and drawings</li></ul>		<ul style="list-style-type: none"><li>Represent relationships using unit rates</li></ul>	
		<ul style="list-style-type: none"><li>Represent ratios found in real-life contexts, using concrete materials, drawings, and standard fractional notation</li></ul>	